

U.S.S.N. 10/827,196

In the Claims

Please amend Claims 6 and 16.

U.S.S.N. 10/827,196

Listing of Claims

Claims 1-5 (canceled)

6. (currently amended) A pointing device with a locus smoothing function, comprising:

a locus processing circuit receiving a digitized displacement and executing an accumulation procedure to generate an accumulated value of displacement, in which the digitized displacement comprises a plurality of directional displacements having at least a first directional displacement and a second directional displacement, the accumulated value comprises a plurality of directional accumulated values having at least a first directional accumulated value and a second directional accumulated value, and the accumulation procedure accumulates the first directional displacement to yield the first directional accumulated value, and the second directional displacement to yield the second directional accumulated value;

wherein when the accumulated value satisfies a preset condition that the first directional accumulated value is not equal to a first preset value θ and the second directional accumulated value is not equal to a second preset value such that the first preset value is 0 and the second preset value is

U.S.S.N. 10/827,196

0, the accumulated value is output to a processing device for smoothing a locus of a pointer on a display device and a reset procedure is executed to reset the accumulated value.

Claims 7-8 (canceled)

9. (previously presented) A pointing device with a locus smoothing function, comprising:

a locus processing circuit receiving a digitized displacement and executing an accumulation procedure to generate an accumulated value of displacement, in which the digitized displacement comprises a plurality of directional displacements having at least a first directional displacement and a second directional displacement, the accumulated value comprises a plurality of directional accumulated values having at least a first directional accumulated value and a second directional accumulated value, and the accumulation procedure accumulates the first directional displacement to yield the first directional accumulated value, and the second directional displacement to yield the second directional accumulated value;

wherein when the accumulated value satisfies a preset condition that the first directional accumulated value is not equal to 0, the second directional accumulated value is not

U.S.S.N. 10/827,196

equal to 0, and the first directional accumulated value is greater than 2 or the second directional accumulated value is greater than 2, wherein when the first directional accumulated value is greater than 4 or the second directional accumulated value is greater than 4, the accumulated value is output to a processing device for smoothing a locus of a pointer on a display device and a reset procedure is executed to reset the accumulated value.

Claims 10-15 (canceled)

16. (currently amended) A locus smoothing method, appropriate for a pointing device, comprising the steps of:

receiving a digitized displacement and executing an accumulation procedure to generate an accumulated value of displacement, in which the digitized displacement comprises a plurality of directional displacements having at least a first directional displacement and a second directional displacement, the accumulated value comprises a plurality of directional accumulated values having at least a first directional accumulated value and a second directional accumulated value, and the accumulation procedure accumulates the first directional displacement to yield the first directional accumulated value,

U.S.S.N. 10/827,196

and the second directional displacement to yield the second directional accumulated value; and

determining whether the accumulated value satisfies a preset condition that the first directional accumulated value is not equal to a first preset value θ and the second directional accumulated value is not equal to a second preset value such that the first preset value is 0 and the second preset value is 0, if so, the accumulated value is output to a processing device for smoothing a locus of a pointer on a display device and a reset procedure is executed to reset the accumulated value.

17. (canceled)

18. (previously presented) A locus smoothing method, appropriate for a pointing device, comprising the steps of:

receiving a digitized displacement and executing an accumulation procedure to generate an accumulated value of displacement, in which the digitized displacement comprises a plurality of directional displacements having at least a first directional displacement and a second directional displacement, the accumulated value comprises a plurality of directional accumulated values having at least a first directional accumulated value and a second directional accumulated value,

U.S.S.N. 10/827,196

and the accumulation procedure accumulates the first directional displacement to yield the first directional accumulated value, and the second directional displacement to yield the second directional accumulated value; and

determining whether the accumulated value satisfies a preset condition that the first directional accumulated value is not equal to a first preset value, the second directional accumulated value is not equal to a second preset value, and the first directional accumulated value is greater than a third preset value or the second directional accumulated value is greater than a fourth preset value, wherein before the step of determining whether the accumulated value satisfies a preset condition, the method further comprises the step of:

determining whether the first directional accumulated value is greater than a fifth preset value or the second directional accumulated value is greater than a sixth preset value, if so, the accumulated value is output to the processing device for smoothing a locus of a pointer on a display device and a reset procedure is executed to reset the accumulated value.

19. (previously presented) The locus smoothing method as claimed in claim 18, wherein the first preset value is 0, the

U.S.S.N. 10/827,196

second preset value is 0, the third preset value is 2, the fourth preset value is 2, the fifth preset value is 4, and the sixth preset value is 4.

20. (previously presented). The locus smoothing method as claimed in claim 18, wherein the reset procedure resets the first directional accumulated value to 0 and the second directional accumulated value to 0.